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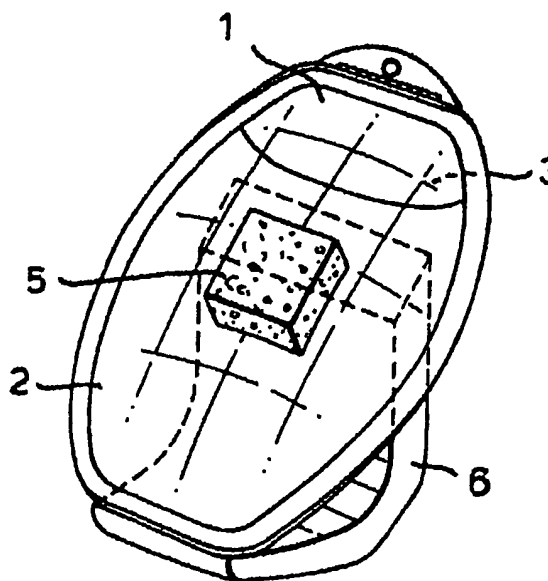
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(54) Title: AIR FRESHENER OR INSECTICIDAL DEVICE

(57) Abstract

An air freshener or insecticidal device which comprises at least one chamber containing a liquid fragrance or insecticide, said chamber having a wall of a material which enables the vapours of the fragrance or insecticide to diffuse into the environment in which the device is placed, and an adhesive pad for attaching the device to a surface such that said wall faces, away from and is spaced apart from said surface.



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Air Freshener or Insecticidal Device

The present invention relates to an air freshener or insecticidal device which contains a liquid fragrance or insecticide.

Devices for perfuming ambient air and enclosed spaces which contain a liquid fragrance and have a wall of a material which enables the vapours of the fragrance to diffuse into the environment are known, for example, from US-A-4,634,614. Figure 6 shows a device in which the fragrance is held in a container with a lid made of a material which enables the vapours of the fragrance to diffuse out. In use the container is simply placed on a horizontal surface.

Devices for perfuming ambient air and enclosed spaces which contain a liquid fragrance absorbed on a substrate are also known. The device typically allows the fragrance to diffuse into the environment through vents in the side thereof. Since it is not possible to see whether there is any liquid fragrance remaining in the substrate, a consumer does not have a visible end-of-life indication.

An air freshener device is also known which comprises a gelled fragrance held within a container having vents positioned at the front. The gelled fragrance is visible through the vents which provides an end-of-life indication.

30

The present invention provides an air freshener or insecticidal device which comprises at least one chamber containing a liquid fragrance or insecticide, said chamber having a wall of a material which enables the vapours of the fragrance or insecticide to diffuse into the environment in which the device is placed, and an

adhesive pad for attaching the device to a surface such that said wall is spaced apart from said surface.

Said wall may face said surface, but preferably, the wall
5 faces away from the surface.

By having the wall facing away from and spaced apart from the surface, it has been found that the diffusion of vapours into the environment is enhanced.

10

Advantageously, the wall is positioned such that the chamber containing the fragrance is positioned between the wall and said surface. In this way, diffusion of the fragrance or insecticide into the environment is not
15 impeded by the position of the chamber.

Preferably, the device is adapted to be positioned during use in an orientation such that the liquid fragrance or insecticide is always in contact with at least part of
20 said wall throughout the useful life of the device.

Since the liquid fragrance or insecticide is always in contact with at least part of the wall, we have surprisingly found that a more constant release of
25 fragrance or insecticide can be achieved. It is postulated, although we are not bound by this theory, that the wall may have a wicking action which draws the liquid up so that it is spread throughout the wall before it diffuses into the environment.

30

The device can be adapted to be placed in an appropriate orientation by a number of different means. A single device may have one or more than one for example two or three of these means.

35

A first means comprises a stand which enables the device

to be placed in the desired orientation when the device is placed on a horizontal surface. Thus, the device may comprise a stand such that when the device is in use said wall is vertical or inclined from the vertical.

5

Preferably the wall is inclined at up to 30°, for example, from 10° to 20° from the vertical. The stand may be integral or separate from the device.

- 10 Advantageously, the device further comprises a hook or other attachment means to attach the device to. For example, a clothes rail or other similar surface. This will allow the device to be placed in, for example, a wardrobe and allow diffusion of fragrance and/or
- 15 insecticide to clothes hanging in the wardrobe.

The permeable wall which allows the fragrance or insecticide to diffuse into the environment may be made of any suitable material. For example, a polyolefin.

- 20 The wall may, in particular, be that described in US A 4 634 614.

- In order to prevent the device from releasing fragrance or insecticide before it is used, said wall may be
- 25 covered by an impermeable sheet which is removed before the device is used. For example, the sheet may simply be peeled off the wall or otherwise removed and discarded. The sheet may be made of, for example, a metal such as aluminium. Alternatively a number of vents may be
- 30 provided to allow for an adjustable release of the perfume or insecticide.

Figures 1 and 2 illustrate an embodiment of a device of the present invention.

The device of the present invention is such that a user can easily be provided with a visible end-of-life indication. The back of the device positioned away from said wall and the surface to which the device is applied
5 and adjacent said wall can be transparent such that the level of the fragrance or insecticide in the device can easily be seen.

Alternatively, when the device comprises stand, the stand
10 is preferably made of a transparent material such that the fragrance or insecticide in the device can easily be seen thus also providing a user with a visible end of life indication. Equally, if the device comprises means to hang the device, the hanging means such as a hook may
15 also usefully be fabricated from a transparent material.

It has been found, however, that some fragrances or insecticides may damage or mark some surfaces. However, since the wall faces away from the surface on which the
20 device is applied, the risk of damage to the surface is minimised.

The adhesive pad may be positioned on the front of the device such that it does not cover all of a front surface
25 of the device. For example the pad may be place only at the top or only at the bottom of the device.

Alternatively, it may be placed towards the centre of the device. Alternatively, two or more pads may be used for example, one may be place at the top and one placed at
30 the bottom of the device, or one on either side of the device or any other permutation which is convenient.

Embodiments of the invention will now be further described by way of example only with reference to the
35 accompanying drawings in which:

Figure 1 is the schematic representation of a first embodiment of an air freshener or insecticidal device according to the present invention and;

5

Figure 2 is a schematic representation of a second embodiment of an air freshener according to the invention showing the device attached to a wall of a room.

10 Figures 1 and 2 show two embodiments of an air freshener device according to the present invention. The two embodiments are very similar to each other as will be described herein below, and therefore the same reference numeral has been used to refer to similar parts of the
15 two embodiments. In both embodiments the device 1 comprises a chamber 2 containing a liquid fragrance having a rear wall 3 made of a material which enables the vapours of the fragrance to diffuse into the environment. The rear wall 3 may be covered by an impermeable sheet
20 (not shown) which must be removed before the device is used. The front surface of the chamber 2 is made of a transparent material such as a transparent plastics material which enables easy inspection of the level of the fragrance in the chamber 2 from the front of the
25 device 1. This provides a visible end-of-life indication.

The embodiment shown in figure 1 shows the device 1 positioned in a stand 6. The stand 6 allows the chamber
30 2 to be positioned at an angle such that the liquid fragrance within the chamber is always in contact with the rear wall 3 of the chamber 2.

In the embodiment shown in figure 2 the stand 6 has been
35 removed from the device 1. However, it is also envisaged that similar embodiment of the device could allow the

device to be attached to the wall 7 by means of the adhesive pad 5 without having to remove the stand 6 from the device 1.

- 5 Referring now to figure 2, the front surface 4 of the chamber 2 has attached thereto an adhesive pad 5 which allows the device to be attached to a surface such as a wall, as will be described herein below. In the illustrated embodiment of the invention, the adhesive pad
10 is formed from a transparent material. However, in other uses different materials, may be appropriate. Such as those which are not transparent.

- Because the adhesive pad 5 is positioned on a front
15 surface 4 of the chamber 2, the device 1 may be attached to a vertical surface 7 such as a wall in a room of a house in such a way that the rear wall 3 faces away from the vertical surface 7 and faces into the room. This enhances the diffusion, into the atmosphere of the
20 fragrance contained within the chamber 2.

CLAIMS

1. An air freshener or insecticidal device which
5 comprises at least one chamber containing a liquid
fragrance or insecticide, said chamber having a wall
of a material which enables the vapours of the
fragrance or insecticide to diffuse into the
environment in which the device is placed, and an
10 adhesive pad for attaching the device to a surface
such that said wall is spaced apart from said
surface.
2. A device according to claim 1 wherein the wall faces
15 away from the surface.
3. A device according to claim 2 wherein the wall is
positioned such that the chamber containing the
fragrance is positioned between the wall and said
20 surface.
4. A device according to any one of the preceding
claims which also comprises a stand and/or a hook.
- 25 5. A device according to any one of the preceding
claims in which said wall is made of a polyolefin.
6. A device according to any one of the preceding
claims where in said wall is covered by an
30 impermeable sheet which is removed before the device
is used.
7. A device according to any one of the preceding
claims wherein the side of the device positioned on
35 the opposite side from said wall is transparent such
that the amount of liquid fragrance or insecticide

remaining can be seen.

- 5 8. A device according to any one of the preceding claims which device is adapted to be positioned during use in an orientation such that the liquid fragrance or insecticide is always in contact with at least part of said wall throughout the useful life of the device.
- 10 9. A device according to claim 8 wherein the wall is inclined at up to 30°, for example from 10° to 20° from the vertical.

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Fig.1.

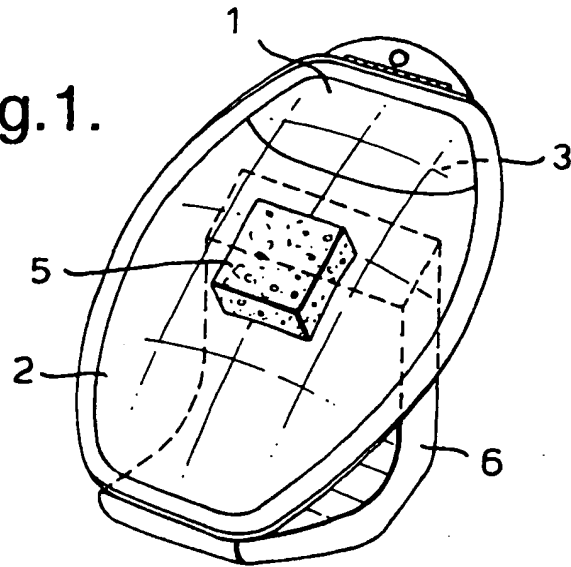
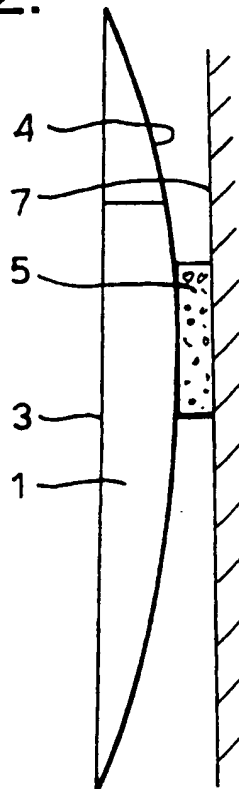


Fig.2.



INTERNATIONAL SEARCH REPORT

Inter. Patent Application No

PCT/GB 00/01600

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61L9/12 A01M1/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61L A01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 645 081 A (CELAFLOR GMBH) 29 March 1995 (1995-03-29) column 3, line 6 - line 17 column 4, line 11 - line 37; claims; figures ---	1-7
X	US 4 161 283 A (HYMAN SY) 17 July 1979 (1979-07-17) column 5, line 16 - line 33; figures ---	1-7
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A	GB 2 251 601 A (MOWBRAY GEORGE M) 15 July 1992 (1992-07-15) claims; figures ---	1-9
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

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Date of the actual completion of the international search

27 July 2000

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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